Claims

1-9 Canceled

10. (New) An exposure control method for a camera with at least one image sensor in which an image brightness set-point (Hsoll) is preset and control is carried out with reference to this image brightness set-point (Hsoll), the method comprising:

adjusting a gradient (α) by controlling at least one of an integration time or an intensification of an image sensor;

determining a new gradient from an initial gradient $\alpha 1$, image brightness set-point Hsoll and current image brightness Hist according to the formula: $\alpha 2 = \alpha 1 * Hsoll / Hist$.

11. (New) A method according to claim 10, wherein image brightness Hist is compared with a tolerance range (Hsoll1, Hsoll2) around image brightness set-point (Hsoll); and a new gradient $\alpha 2$ is preset in one control step only if image brightness Hist lies outside said tolerance range (Hsoll1, Hsoll2) around image brightness set-point (Hsoll).

12. (New) A method according to claim 10, wherein a preset characteristic of a characteristic (K) of the dependence of image brightness (H) on illumination (B) is taken into consideration when determining new gradient $\alpha 2$.

13. (New) A method according to claim 12, wherein characteristic K does not run through origin U and new gradient $\alpha 2$ is determined considering at least one offset value Offs1 according to the following formula: $\alpha 2 = \alpha 1 * (Hsoll - Offs1) / (Hist - Offs1)$.

14. (New) A method according to claim 13, wherein for each gradient ($\alpha 2$, $\alpha 1$) a respective offset value (Offs1, Offs2) is provided and new gradient $\alpha 2$ is determined

considering said respective offset values according to the following formula: $\alpha 2 = \alpha 1 * (Hsoll - Offs1) / (Hist - Offs2)$.

15. (New) An exposure control device for a camera with at least one image sensor in which an image brightness set-point Hsoll is preset and control is carried out with reference to this image brightness set-point Hsoll, the device comprising:

a computer for evaluating images and for substantially controling exposure and image brightness.

16. (New) A device according to claim 15, wherein specific, relevant pixels are selected to measure an image brightness and image brightness control is substantially carried out with reference to selected regions.

17. (New) A device according to claim15, wherein the computer uses an adjusted sensitivity for the current image brightness of a scene the image of which is being formed and for providing this value to a system.

18. (New) A device according to claim 15, wherein the device is used in vehicle environment monitoring camera for motor vehicles.